



UNITED STATES  
PATENT AND  
TRADEMARK OFFICE

NOVEMBER 29, 2001

STEVEN J. WEISSBURG  
238 MAIN STREET  
SUITE 303  
CAMBRIDGE, MA 02142

PTAS

Under Secretary of Commerce For Intellectual Property and  
Director of the United States Patent and Trademark Office  
Washington, DC 20231  
www.uspto.gov

RECEIVED DEC 10 2001



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UNITED STATES PATENT AND TRADEMARK OFFICE  
NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 09/21/2001

REEL/FRAME: 012194/0370  
NUMBER OF PAGES: 4

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:  
LORENZ, ADAM M.

DOC DATE: 07/27/2001

ASSIGNOR:  
SACHS, EMANUEL M.

DOC DATE: 09/17/2001

ASSIGNOR:  
ALLEN, SAMUEL M.

DOC DATE: 08/02/2001

ASSIGNEE:  
MASSACHUSETTS INSTITUTE OF  
TECHNOLOGY  
77 MASSACHUSETTS AVENUE  
NE25-230  
CAMBRIDGE, MASSACHUSETTS 02139

SERIAL NUMBER: 09863073  
PATENT NUMBER:

FILING DATE: 05/21/2001  
ISSUE DATE:

Ex. Mail Label # EV 239312614 US

012194/0370 PAGE 2

ANTIONE ROYALL, EXAMINER  
ASSIGNMENT DIVISION  
OFFICE OF PUBLIC RECORDS

20231, on Sept. 21, 2001

Steven J. Weissburg

**BEST AVAILABLE COPY**

(Form PTO-1595-Recordation Form Cover Sheet [16-5]-page 1 of 3)

## ASSIGNMENT

I, Adam M. Lorenz, of 7 Buckingham Street, Somerville, MA 02143;

I, Emanuel M. Sachs, of 18 Moreland Ave., Newton, MA 02159;

and I, Samuel M. Allen, of 24 Alveston Street, Jamaica Plain, MA 02130, jointly and severally referred to below as an "ASSIGNOR", have certain rights in an invention entitled **TECHNIQUES FOR INFILTRATION OF A POWDER METAL SKELETON BY A SIMILAR ALLOY WITH MELTING POINT DEPRESSED**, and which is found in a U.S. Patent Application U.S.S.N. 09/863,073, filed on May 21, 2001 with the United States Patent and Trademark Office, which claims priority to Provisional U.S. Patent Application U.S.S.N. 60/206,066, filed on May 22, 2000 with the United States Patent and Trademark Office (the "INVENTION"). In consideration of One Dollar and other valuable consideration paid to me by THE MASSACHUSETTS INSTITUTE OF TECHNOLOGY, a corporation of Massachusetts, having its principal place of business at 77 Massachusetts Avenue, Cambridge, Massachusetts, 02139, ("ASSIGNEE") the receipt of which is hereby acknowledged, ASSIGNOR does hereby sell, assign and transfer unto said ASSIGNEE its successors and assigns, ASSIGNOR'S entire right, title and interest for the United States of America and all foreign countries including all rights of priority in said INVENTION or improvement(s) in the INVENTION, patent application(s) and patent(s) listed above and in all Letters Patent of the United States and all foreign countries which may or shall be granted on said INVENTION(s), or any parts thereof, or on said applications, or any divisional, continuing, reissue or other applications based thereon. And ASSIGNOR agrees, for ASSIGNOR and ASSIGNOR'S heirs, successors and assigns with said ASSIGNEE and its successors and assigns but at its expense and charges, hereafter to do all acts necessary or proper to secure the grant of Letters Patent in the United States and in all other countries to said ASSIGNEE, with specifications and claims in such form as shall be approved by the counsel of said ASSIGNEE and to vest and confirm in said ASSIGNEE, its successors and assigns, the legal title to all such patents.

And ASSIGNOR does hereby authorize and request the Commissioner of Patents and Trademarks of the United States to issue such Letters Patent as shall be granted upon said application or applications based thereon to said ASSIGNEE, its successors and assigns.

WITNESS my hand and seal:

ASSIGNOR: Samuel M. Allen

SIGNATURE: Samuel M. Allen DATE: August 2, 2001

The above named Samuel M. Allen personally appeared and acknowledged the foregoing instrument to be his/her free act and deed, before me, on the dates indicated.

Notary Public

Kathleen R. Farrell 8/2/01  
My commission expires 2/7/03

## ASSIGNMENT

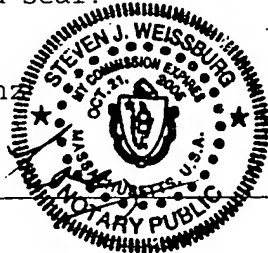
I, Adam M. Lorenz, of 7 Buckingham Street, Somerville, MA 02143;  
I, Emanuel M. Sachs, of 18 Moreland Ave., Newton, MA 02159;  
and I, Samuel M. Allen, of 24 Alveston Street, Jamaica Plain, MA 02130, jointly and severally referred to below as an "ASSIGNOR", have certain rights in an invention entitled TECHNIQUES FOR INFILTRATION OF A POWDER METAL SKELETON BY A SIMILAR ALLOY WITH MELTING POINT DEPRESSED, and which is found in a U.S. Patent Application U.S.S.N. 09/863,073, filed on May 21, 2001 with the United States Patent and Trademark Office, which claims priority to Provisional U.S. Patent Application U.S.S.N. 60/206,066, filed on May 22, 2000 with the United States Patent and Trademark Office (the "INVENTION"). In consideration of One Dollar and other valuable consideration paid to me by THE MASSACHUSETTS INSTITUTE OF TECHNOLOGY, a corporation of Massachusetts, having its principal place of business at 77 Massachusetts Avenue, Cambridge, Massachusetts, 02139, ("ASSIGNEE") the receipt of which is hereby acknowledged, ASSIGNOR does hereby sell, assign and transfer unto said ASSIGNEE its successors and assigns, ASSIGNOR'S entire right, title and interest for the United States of America and all foreign countries including all rights of priority in said INVENTION or improvement(s) in the INVENTION, patent application(s) and patent(s) listed above and in all Letters Patent of the United States and all foreign countries which may or shall be granted on said INVENTION(s), or any parts thereof, or on said applications, or any divisional, continuing, reissue or other applications based thereon. And ASSIGNOR agrees, for ASSIGNOR and ASSIGNOR'S heirs, successors and assigns with said ASSIGNEE and its successors and assigns but at its expense and charges, hereafter to do all acts necessary or proper to secure the grant of Letters Patent in the United States and in all other countries to said ASSIGNEE, with specifications and claims in such form as shall be approved by the counsel of said ASSIGNEE and to vest and confirm in said ASSIGNEE, its successors and assigns, the legal title to all such patents.

And ASSIGNOR does hereby authorize and request the Commissioner of Patents and Trademarks of the United States to issue such Letters Patent as shall be granted upon said application or applications based thereon to said ASSIGNEE, its successors and assigns.

WITNESS my hand and seal:

ASSIGNOR: Adam M. Lorenz

SIGNATURE: *Adam*



DATE: 7/27/01

The above named Adam M. Lorenz personally appeared and acknowledged the foregoing instrument to be his/her free act and deed, before me, on the dates indicated.

Notary Public

*Steven J. Weissburg*

## ASSIGNMENT

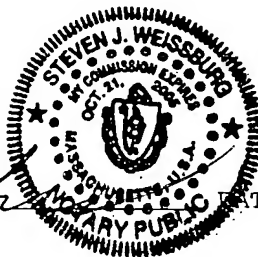
I, Adam M. Lorenz, of 7 Buckingham Street, Somerville, MA 02143;  
I, Emanuel M. Sachs, of 18 Moreland Ave., Newton, MA 02159;  
and I, Samuel M. Allen, of 24 Alveston Street, Jamaica Plain, MA 02130, jointly and severally referred to below as an "ASSIGNOR", have certain rights in an invention entitled **TECHNIQUES FOR INFILTRATION OF A POWDER METAL SKELETON BY A SIMILAR ALLOY WITH MELTING POINT DEPRESSED**, and which is found in a U.S. Patent Application U.S.S.N. 09/863,073, filed on May 21, 2001 with the United States Patent and Trademark Office, which claims priority to Provisional U.S. Patent Application U.S.S.N. 60/206,066, filed on May 22, 2000 with the United States Patent and Trademark Office (the "INVENTION"). In consideration of One Dollar and other valuable consideration paid to me by THE MASSACHUSETTS INSTITUTE OF TECHNOLOGY, a corporation of Massachusetts, having its principal place of business at 77 Massachusetts Avenue, Cambridge, Massachusetts, 02139, ("ASSIGNEE") the receipt of which is hereby acknowledged, ASSIGNOR does hereby sell, assign and transfer unto said ASSIGNEE its successors and assigns, ASSIGNOR'S entire right, title and interest for the United States of America and all foreign countries including all rights of priority in said INVENTION or improvement(s) in the INVENTION, patent application(s) and patent(s) listed above and in all Letters Patent of the United States and all foreign countries which may or shall be granted on said INVENTION(s), or any parts thereof, or on said applications, or any divisional, continuing, reissue or other applications based thereon. And ASSIGNOR agrees, for ASSIGNOR and ASSIGNOR'S heirs, successors and assigns with said ASSIGNEE and its successors and assigns but at its expense and charges, hereafter to do all acts necessary or proper to secure the grant of Letters Patent in the United States and in all other countries to said ASSIGNEE, with specifications and claims in such form as shall be approved by the counsel of said ASSIGNEE and to vest and confirm in said ASSIGNEE, its successors and assigns, the legal title to all such patents.

And ASSIGNOR does hereby authorize and request the Commissioner of Patents and Trademarks of the United States to issue such Letters Patent as shall be granted upon said application or applications based thereon to said ASSIGNEE, its successors and assigns.

WITNESS my hand and seal:

ASSIGNOR: Emanuel M. Sachs

SIGNATURE: \_\_\_\_\_



DATE: \_\_\_\_\_

9/17/01

The above named Emanuel M. Sachs personally appeared and acknowledged the foregoing instrument to be his/her free act and deed, before me, on the dates indicated.

Notary Public

*Steven J. Weissburg*

## DECLARATION

*(ORIGINAL, DESIGN, NATIONAL STAGE OF PCT, SUPPLEMENTAL,  
DIVISIONAL, CONTINUATION OR C-I-P)*

As a below named inventor, I hereby declare that:

### TYPE OF DECLARATION

This declaration is of the following type: (check one applicable item below)

- ☒ original
- ☐ design
- ☐ supplemental

**NOTE:** If the declaration is for an international application being filed as a divisional, continuation or continuation-in-part application, do not check next item; check appropriate one of last three items.

- ☐ national stage of PCT

**NOTE:** If one of the following 3 items apply, then complete and also attach added pages for divisional, continuation or c-i-p.

- ☐ divisional
- ☐ continuation
- ☐ continuation-in-part (C-I-P)

### INVENTORSHIP IDENTIFICATION

**WARNING:** If the inventors are each not the inventors of all the claims, an explanation of the facts, including the ownership of all the claims at the time the last claimed invention was made, should be submitted.

My residence, post office address and citizenship are as stated below next to my name. I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

### TITLE OF INVENTION

TECHNIQUES FOR INFILTRATION OF A POWDER METAL SKELETON BY A SIMILAR ALLOY WITH  
MELTING POINT DEPRESSED

### SPECIFICATION IDENTIFICATION

the specification of which: (complete (a), (b) or (c))

- (a) ☐ is attached hereto.
- (b) ☒ was filed on May 21, 2001 as Serial No. 09/863,073 under Express Mail No. EL662947555US, attorney docket No. MIT 8873CPUS.

Express Mail Label # EV239312614US

NOTE: Amendments filed after the original papers are deposited with the PTO which contain new matter are not accorded a filing date by being referred to in the declaration. Accordingly, the amendments involved are those filed with the application papers or, in the case of a supplemental declaration, are those amendments claiming matter not encompassed in the original statement of invention or claims. See 37 CFR 1.67.

- (c) ☐ was described and claimed in PCT International Application No. \_\_\_\_\_  
filed on \_\_\_\_\_ and as amended under PCT Article 19 on  
\_\_\_\_\_ (none) \_\_\_\_\_ (if any).

### **SUPPLEMENTAL DECLARATION (37 C.F.R. § 1.67(b))**

*(complete the following where a supplemental declaration is being submitted)*

- ☐ I hereby declare that the subject matter of the  
☐ attached amendment  
☐ amendment filed on \_\_\_\_\_

was part of my/our invention before the filing date of the original application, above-identified, for such invention.

### **ACKNOWLEDGEMENT OF REVIEW OF PAPERS AND DUTY OF CANDOR**

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information,

- ☒ which is material to patentability as defined in 37, Code of Federal Regulations, § 1.56

*(also check the following items, if desired)*

- ☐ and which is material to the examination of this application, namely, information where there is a substantial likelihood that a reasonable Examiner would consider it important in deciding whether to allow the application to issue as a patent, and  
☐ In compliance with this duty there is attached an information disclosure statement in accordance with 37 CFR 1.98.

### **PRIORITY CLAIM (35 U.S.C. § 119(a)-(d))**

NOTE: "The claim to priority need be in no special form and may be made by the attorney or agent if the foreign application is referred to in the oath or declaration as required by § 1.63. The claim for priority and the certified copy of the foreign application specified in 35 U.S.C. 119(b) must be filed in the case of an interference (§ 1.630), when necessary to overcome the date of a reference relied upon by the examiner, when specifically required by the examiner, and in all other situations, before the patent is granted. If the claim for priority or the certified copy of the foreign application is filed after the date the issue fee is paid, it must be accompanied by a petition requesting entry and by the fee set forth in § 1.17(i). If the certified copy is not in the English language, a translation need not be filed except in the case of interference; or when necessary to overcome the date of a reference relied upon by the examiner; or when specifically required by the examiner, in which event an English language translation must be filed together with a statement that the translation of the certified copy is accurate." 37 C.F.R. § 1.55(a).

I hereby claim foreign priority benefits under Title 35, United States Code, §§ 119(a)-(d) of any foreign application(s) for patent or inventor's certificate or of any PCT international application(s) designating at



least one country other than the United States of America listed below and have also identified below any foreign application(s) for patent or inventor's certificate or any PCT international application(s) designating at least one country other than the United States of America filed by me on the same subject matter having a filing date before that of the application(s) of which priority is claimed.

(complete (d) or (e))

(d) ☐ no such applications have been filed.

(e) ☐ such applications have been filed as follows.

NOTE: Where item (c) is entered above and the international application which designated the U.S. itself claimed priority check item (e), enter the details below and make the priority claim.

**A. PRIOR FOREIGN/PCT APPLICATION(S) FILED WITHIN 12 MONTHS  
(6 MONTHS FOR DESIGN) PRIOR TO THIS APPLICATION AND ANY  
PRIORITY CLAIMS UNDER 35 U.S.C. § 119(a)-(d)**

Country (or indicate if PCT)	Application Number	Date of Filing (day, month, year)	Priority Claimed Under 37 USC 119
			<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/>
			<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/>
			<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/>
			<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/>
			<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/>

**CLAIM FOR BENEFIT OF PRIOR U.S. PROVISIONAL APPLICATION(S) (34  
U.S.C. § 119(e))**

I hereby claim the benefit under Title 35, United States Code, § 119(e) of any United States provisional application(s) listed below:

Provisional Application Number	Filing Date
60/206,066	22 MAY 2000

**CLAIM FOR BENEFIT OF EARLIER US/PCT APPLICATION(S) UNDER 35  
U.S.C. 120**

☐ The claim for the benefit of any such applications are set forth in the attached ADDED PAGES TO COMBINED DECLARATION AND POWER OF ATTORNEY FOR DIVISIONAL, CONTINUATION OR CONTINUATION-IN PART (C-I-P) APPLICATION.

**ALL FOREIGN APPLICATION(S), IF ANY FILED MORE THAN 12 MONTHS  
(6 MONTHS FOR DESIGN) PRIOR TO THIS U.S. APPLICATION**

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NOTE: If the application filed more than 12 months from the filing date of this application is a PCT filing forming the basis for this application entering the United States as (1) the national stage, or (2) a continuation, divisional, or continuation-in-part, then also complete added pages to combined declaration and power of attorney for divisional, continuation or C-I-P application for benefit of the prior U.S. Or PCT application(s) under 35 U.S.C. § 120.

## **CORRESPONDENCE ADDRESS**

### **SEND CORRESPONDENCE TO**

Steven J Weissburg  
238 Main Street  
Suite 303  
Cambridge, MA 02142

### **DIRECT TELEPHONES CALLS TO:** *(Name and telephone number)*

Steven J. Weissburg  
(617) 354-9343

**Customer Number: .021403**

*(complete the following if applicable)*

Since this filing is a ☐ continuation ☐ divisional there is attached hereto a Change of Correspondence Address so that there will be no question as to where the PTO should direct all correspondence.

## DECLARATION

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

## SIGNATURE(S)

*NOTE: Carefully indicate the family (or last) name as it should appear on the filing receipt and all other documents.*

### Full name of sole or first inventor

Adam \_\_\_\_\_ M. \_\_\_\_\_ Lorenz \_\_\_\_\_  
(GIVEN NAME) (MIDDLE INITIAL OR NAME) FAMILY (OR LAST NAME)

Inventor's signature Adam Lorenz

Date 7/27/01 Country of Citizenship USA

Residence 7 Buckingham Street, Somerville, MA 02143 USA

Post Office Address same

### Full name of second joint inventor, if any

Emanuel \_\_\_\_\_ M. \_\_\_\_\_ Sachs \_\_\_\_\_  
(GIVEN NAME) (MIDDLE INITIAL OR NAME) FAMILY (OR LAST NAME)

Inventor's signature \_\_\_\_\_

Date \_\_\_\_\_ Country of Citizenship USA

Residence 18 Moreland Avenue, Newton, MA 02159 USA

Post Office Address same

### Full name of third joint inventor, if any

Samuel \_\_\_\_\_ M. \_\_\_\_\_ Allen \_\_\_\_\_  
(GIVEN NAME) (MIDDLE INITIAL OR NAME) FAMILY (OR LAST NAME)

Inventor's signature \_\_\_\_\_

Date \_\_\_\_\_ Country of Citizenship USA

Residence 24 Alveston Street, Jamaica Plain, MA 02130

Post Office Address same

*(check proper box(es) for any of the following added page(s) that form a part of this declaration)*

☐ Signature for fourth and subsequent joint inventors. NUMBER OF PAGES ADDED \_\_\_\_

\* \* \*

☐ Signature by administrator(trix), executor(trix) or legal representative for deceased or incapacitated inventor. NUMBER OF PAGES ADDED \_\_\_\_.

\* \* \*

☐ Signature for inventor who refuses to sign or cannot be reached by person authorized under 37 CFR 1.47. NUMBER OF PAGES ADDED \_\_\_\_.

\* \* \*

☐ Added page for signature by one joint inventor on behalf of deceased inventor(s) where legal representative cannot be appointed in time (37 CFR 1.47).

\* \* \*

☐ Added pages to combined declaration and power of attorney for divisional, continuation, or continuation-in-part (C-I-P) application. . NUMBER OF PAGES ADDED \_\_\_\_.

\* \* \*

☐ Authorization of attorney(s) to accept and follow instructions from representative.

\* \* \*

*(if no further pages form a part of this Declaration, then end this Declaration with this page and check the following item)*

☒ This declaration ends with this page.

## DECLARATION

*(ORIGINAL, DESIGN, NATIONAL STAGE OF PCT, SUPPLEMENTAL,  
DIVISIONAL, CONTINUATION OR C-I-P)*

As a below named inventor, I hereby declare that:

### TYPE OF DECLARATION

This declaration is of the following type: (check one applicable item below)

- ☒ original
- ☐ design
- ☐ supplemental

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- ☐ national stage of PCT

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TECHNIQUES FOR INFILTRATION OF A POWDER METAL SKELETON BY A SIMILAR ALLOY WITH  
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Express Mail Label No. EV239312614US

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- (c) ☐ was described and claimed in PCT International Application No. \_\_\_\_\_  
filed on \_\_\_\_\_ and as amended under PCT Article 19 on  
\_\_\_\_\_ (none) \_\_\_\_\_ (if any).

### **SUPPLEMENTAL DECLARATION (37 C.F.R. § 1.67(b))**

*(complete the following where a supplemental declaration is being submitted)*

- ☐ I hereby declare that the subject matter of the  
☐ attached amendment  
☐ amendment filed on \_\_\_\_\_

was part of my/our invention before the filing date of the original application, above-identified, for such invention.

### **ACKNOWLEDGEMENT OF REVIEW OF PAPERS AND DUTY OF CANDOR**

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information,

- ☒ which is material to patentability as defined in 37, Code of Federal Regulations, § 1.56

*(also check the following items, if desired)*

- ☐ and which is material to the examination of this application, namely, information where there is a substantial likelihood that a reasonable Examiner would consider it important in deciding  
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least one country other than the United States of America listed below and have also identified below any foreign application(s) for patent or inventor's certificate or any PCT international application(s) designating at least one country other than the United States of America filed by me on the same subject matter having a filing date before that of the application(s) of which priority is claimed.

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(6 MONTHS FOR DESIGN) PRIOR TO THIS APPLICATION AND ANY  
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Country (or indicate if PCT)	Application Number	Date of Filing (day, month, year)	Priority Claimed Under 37 USC 119			
			<input type="checkbox"/>	Yes	No	<input type="checkbox"/>
			<input type="checkbox"/>	Yes	No	<input type="checkbox"/>
			<input type="checkbox"/>	Yes	No	<input type="checkbox"/>
			<input type="checkbox"/>	Yes	No	<input type="checkbox"/>
			<input type="checkbox"/>	Yes	No	<input type="checkbox"/>

**CLAIM FOR BENEFIT OF PRIOR U.S. PROVISIONAL APPLICATION(S) (34  
U.S.C. § 119(e))**

I hereby claim the benefit under Title 35, United States Code, § 119(e) of any United States provisional application(s) listed below:

Provisional Application Number	Filing Date
60/206,066	22 MAY 2000

**CLAIM-FOR BENEFIT OF EARLIER US/PCT APPLICATION(S) UNDER 35  
U.S.C. 120**

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**ALL FOREIGN APPLICATION(S), IF ANY FILED MORE THAN 12 MONTHS  
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## CORRESPONDENCE ADDRESS

### SEND CORRESPONDENCE TO

Steven J Weissburg  
238 Main Street  
Suite 303  
Cambridge, MA 02142

### DIRECT TELEPHONES CALLS TO: *(Name and telephone number)*

Steven J. Weissburg  
(617) 354-9343

**Customer Number: 021403**

*(complete the following if applicable)*

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I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

## SIGNATURE(S)

*NOTE: Carefully indicate the family (or last) name as it should appear on the filing receipt and all other documents.*

Full name of sole or first inventor

Adam M. Lorenz  
(GIVEN NAME) (MIDDLE INITIAL OR NAME) FAMILY (OR LAST NAME)

Inventor's signature \_\_\_\_\_

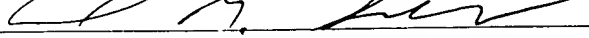
Date \_\_\_\_\_ Country of Citizenship USA

Residence 7 Buckingham Street, Somerville, MA 02143 USA

Post Office Address same

Full name of second joint inventor, if any

Emanuel M. Sachs  
(GIVEN NAME) (MIDDLE INITIAL OR NAME) FAMILY (OR LAST NAME)

Inventor's signature  \_\_\_\_\_

Date 9/12/01 Country of Citizenship USA

Residence 18 Moreland Avenue, Newton, MA 02159 USA

Post Office Address same

Full name of third joint inventor, if any

Samuel M. Allen  
(GIVEN NAME) (MIDDLE INITIAL OR NAME) FAMILY (OR LAST NAME)

Inventor's signature \_\_\_\_\_

Date \_\_\_\_\_ Country of Citizenship USA

Residence 24 Alveston Street, Jamaica Plain, MA 02130

Post Office Address same

(check proper box(es) for any of the following added page(s) that form a part of this declaration)

☐ Signature for fourth and subsequent joint inventors. NUMBER OF PAGES ADDED \_\_\_\_

\* \* \*

☐ Signature by administrator(trix), executor(trix) or legal representative for deceased or incapacitated inventor. NUMBER OF PAGES ADDED \_\_\_\_.

\* \* \*

☐ Signature for inventor who refuses to sign or cannot be reached by person authorized under 37 CFR 1.47. NUMBER OF PAGES ADDED \_\_\_\_.

\* \* \*

☐ Added page for signature by one joint inventor on behalf of deceased inventor(s) where legal representative cannot be appointed in time (37 CFR 1.47).

\* \* \*

☐ Added pages to combined declaration and power of attorney for divisional, continuation, or continuation-in-part (C-I-P) application. . NUMBER OF PAGES ADDED \_\_\_\_.

\* \* \*

☐ Authorization of attorney(s) to accept and follow instructions from representative.

\* \* \*

(if no further pages form a part of this Declaration, then end this Declaration with this page and check the following item)

☒ This declaration ends with this page.

## DECLARATION

*(ORIGINAL, DESIGN, NATIONAL STAGE OF PCT, SUPPLEMENTAL,  
DIVISIONAL, CONTINUATION OR C-I-P)*

As a below named inventor, I hereby declare that:

### TYPE OF DECLARATION

This declaration is of the following type: (check one applicable item below)

- ☒ original
- ☐ design
- ☐ supplemental

**NOTE:** If the declaration is for an international application being filed as a divisional, continuation or continuation-in-part application, do not check next item; check appropriate one of last three items.

- ☐ national stage of PCT

**NOTE:** If one of the following 3 items apply, then complete and also attach added pages for divisional, continuation or c-i-p.

- ☐ divisional
- ☐ continuation
- ☐ continuation-in-part (C-I-P)

### INVENTORSHIP IDENTIFICATION

**WARNING:** If the inventors are each not the inventors of all the claims, an explanation of the facts, including the ownership of all the claims at the time the last claimed invention was made, should be submitted.

My residence, post office address and citizenship are as stated below next to my name. I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

### TITLE OF INVENTION

TECHNIQUES FOR INFILTRATION OF A POWDER METAL SKELETON BY A SIMILAR ALLOY WITH  
MELTING POINT DEPRESSED

### SPECIFICATION IDENTIFICATION

the specification of which: (complete (a), (b) or (c))

- (a) ☐ is attached hereto.
- (b) ☒ was filed on May 21, 2001 as Serial No. 09/863,073 under Express Mail No. EL662947555US, attorney docket No. MIT 8873CPUS.

Express Mail Label # EV239312614 US

**NOTE:** Amendments filed after the original papers are deposited with the PTO which contain new matter are not accorded a filing date by being referred to in the declaration. Accordingly, the amendments involved are those filed with the application papers or, in the case of a supplemental declaration, are those amendments claiming matter not encompassed in the original statement of invention or claims. See 37 CFR 1.67.

- (c) ☐ was described and claimed in PCT International Application No. \_\_\_\_\_  
filed on \_\_\_\_\_ and as amended under PCT Article 19 on  
\_\_\_\_\_ (none) \_\_\_\_\_ (if any).

### **SUPPLEMENTAL DECLARATION (37 C.F.R. § 1.67(b))**

*(complete the following where a supplemental declaration is being submitted)*

- ☐ I hereby declare that the subject matter of the  
☐ attached amendment  
☐ amendment filed on \_\_\_\_\_

was part of my/our invention before the filing date of the original application, above-identified, for such invention.

### **ACKNOWLEDGEMENT OF REVIEW OF PAPERS AND DUTY OF CANDOR**

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information,

- ☒ which is material to patentability as defined in 37, Code of Federal Regulations, § 1.56

*(also check the following items, if desired)*

- ☐ and which is material to the examination of this application, namely, information where there is a substantial likelihood that a reasonable Examiner would consider it important in deciding whether to allow the application to issue as a patent, and  
☐ In compliance with this duty there is attached an information disclosure statement in accordance with 37 CFR 1.98.

### **PRIORITY CLAIM (35 U.S.C. § 119(a)-(d))**

**NOTE:** "The claim to priority need be in no special form and may be made by the attorney or agent if the foreign application is referred to in the oath or declaration as required by § 1.63. The claim for priority and the certified copy of the foreign application specified in 35 U.S.C. 119(b) must be filed in the case of an interference (§ 1.630), when necessary to overcome the data of a reference relied upon by the examiner, when specifically required by the examiner, and in all other situations, before the patent is granted. If the claim for priority or the certified copy of the foreign application is filed after the date the issue fee is paid, it must be accompanied by a petition requesting entry and by the fee set forth in § 1.17(i). If the certified copy is not in the English language, a translation need not be filed except in the case of interference; or when necessary to overcome the date of a reference relied upon by the examiner; or when specifically required by the examiner, in which event an English language translation must be filed together with a statement that the translation of the certified copy is accurate." 37 C.F.R. § 1.55(a).

I hereby claim foreign priority benefits under Title 35, United States Code, §§ 119(a)-(d) of any foreign application(s) for patent or inventor's certificate or of any PCT international application(s) designating at

least one country other than the United States of America listed below and have also identified below any foreign application(s) for patent or inventor's certificate or any PCT international application(s) designating at least one country other than the United States of America filed by me on the same subject matter having a filing date before that of the application(s) of which priority is claimed.

(complete (d) or (e))

(d) ☐ no such applications have been filed.

(e) ☐ such applications have been filed as follows.

NOTE: Where item (c) is entered above and the international application which designated the U.S. itself claimed priority check item (e), enter the details below and make the priority claim.

**A. PRIOR FOREIGN/PCT APPLICATION(S) FILED WITHIN 12 MONTHS  
(6 MONTHS FOR DESIGN) PRIOR TO THIS APPLICATION AND ANY  
PRIORITY CLAIMS UNDER 35 U.S.C. § 119(a)-(d)**

Country (or indicate if PCT)	Application Number	Date of Filing (day, month, year)	Priority Claimed Under 37 USC 119			
			<input type="checkbox"/>	Yes	No	<input type="checkbox"/>
			<input type="checkbox"/>	Yes	No	<input type="checkbox"/>
			<input type="checkbox"/>	Yes	No	<input type="checkbox"/>
			<input type="checkbox"/>	Yes	No	<input type="checkbox"/>
			<input type="checkbox"/>	Yes	No	<input type="checkbox"/>

**CLAIM FOR BENEFIT OF PRIOR U.S. PROVISIONAL APPLICATION(S) (34  
U.S.C. § 119(e))**

I hereby claim the benefit under Title 35, United States Code, § 119(e) of any United States provisional application(s) listed below:

Provisional Application Number	Filing Date
60/206,066	22 MAY 2000

**CLAIM FOR BENEFIT OF EARLIER US/PCT APPLICATION(S) UNDER 35  
U.S.C. 120**

☐ The claim for the benefit of any such applications are set forth in the attached ADDED PAGES TO COMBINED DECLARATION AND POWER OF ATTORNEY FOR DIVISIONAL, CONTINUATION OR CONTINUATION-IN PART (C-I-P) APPLICATION.

**ALL FOREIGN APPLICATION(S), IF ANY FILED MORE THAN 12 MONTHS  
(6 MONTHS FOR DESIGN) PRIOR TO THIS U.S. APPLICATION**

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NOTE: If the application filed more than 12 months from the filing date of this application is a PCT filing forming the basis for this application entering the United States as (1) the national stage, or (2) a continuation, divisional, or continuation-in-part, then also complete added pages to combined declaration and power of attorney for divisional, continuation or C-I-P application for benefit of the prior U.S. Or PCT application(s) under 35 U.S.C. § 120.

## CORRESPONDENCE ADDRESS

### SEND CORRESPONDENCE TO

Steven J Weissburg  
238 Main Street  
Suite 303  
Cambridge, MA 02142

### DIRECT TELEPHONES CALLS TO:

*(Name and telephone number)*

Steven J. Weissburg  
(617) 354-9343

**Customer Number: 021403**

*(complete the following if applicable)*

Since this filing is a ☐ continuation ☐ divisional there is attached hereto a Change of Correspondence Address so that there will be no question as to where the PTO should direct all correspondence.

## DECLARATION

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

## SIGNATURE(S)

*NOTE: Carefully indicate the family (or last) name as it should appear on the filing receipt and all other documents.*

Full name of sole or first inventor

Adam M. Lorenz  
(GIVEN NAME) (MIDDLE INITIAL OR NAME) FAMILY (OR LAST NAME)

Inventor's signature \_\_\_\_\_

Date \_\_\_\_\_ Country of Citizenship USA

Residence 7 Buckingham Street, Somerville, MA 02143 USA

Post Office Address same

Full name of second joint inventor, if any

Emanuel M. Sachs  
(GIVEN NAME) (MIDDLE INITIAL OR NAME) FAMILY (OR LAST NAME)

Inventor's signature \_\_\_\_\_

Date \_\_\_\_\_ Country of Citizenship USA

Residence 18 Moreland Avenue, Newton, MA 02159 USA

Post Office Address same

Full name of third joint inventor, if any

Samuel M. Allen  
(GIVEN NAME) (MIDDLE INITIAL OR NAME) FAMILY (OR LAST NAME)

Inventor's signature Samuel M. Allen

Date August 2, 2001 Country of Citizenship USA

Residence 24 Alveston Street, Jamaica Plain, MA 02130

Post Office Address same

(check proper box(es) for any of the following added page(s) that form a part of this declaration)

☐ Signature for fourth and subsequent joint inventors. NUMBER OF PAGES ADDED \_\_\_\_

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